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Technical Specification

**Universal Mobile Telecommunications System (UMTS);
UICC-terminal interface;
Physical and logical characteristics
(3GPP TS 31.101 version 4.2.1 Release 4)**



Reference

RTS/TSGT-0331101v421

Keywords

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Foreword

This Technical Specification (TS) has been produced by the 3rd Generation Partnership Project (3GPP).

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Version x.y.z

where:

- x the first digit:
 - 1 presented to TSG for information;
 - 2 presented to TSG for approval;
 - 3 or greater indicates TSG approved document under change control.
- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

Introduction

The present document defines a generic Terminal/Integrated Circuit Card (ICC) interface. The present document is independent of the 3GPP applications and can thus be the platform for any IC card application.

The aim of the present document is to ensure interoperability between an ICC and a terminal independently of the respective manufacturer, card issuer or operator. The present document does not define any aspects related to the administrative management phase of the ICC. Any internal technical realisation of either the ICC or the terminal is only specified where these are reflected over the interface.

Application specific details for applications residing on an ICC are specified in the respective application specific documents.

1 Scope

The present document specifies the interface between the UICC and the Terminal for 3G telecom network operation.

The present document specifies:

- the requirements for the physical characteristics of the UICC;
- the electrical interface between the UICC and the Terminal;
- the initial communication establishment and the transport protocols;
- the model which serves as a basis for the logical structure of the UICC;
- the communication commands and the procedures;
- the application independent files and protocols.

The administrative procedures and initial card management are not part of the present document.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] ETSI TS 102 221 Release 4: "Smart Cards; UICC-Terminal interface; Physical and logical characteristics".

3 Definitions, symbols, abbreviations and coding

All definitions, symbols, abbreviations applicable to the terminal are specified in TS 102 221 [1].

4 Physical and logical characteristics

The UICC/terminal interface shall comply with all requirements stated in ETSI TS 102 221 [1]. Where options are indicated in ETSI TS 102 221 [1], the 3GPP application specifications specify which options are to be used for a UICC/terminal interface where the UICC supports the corresponding applications.

Annex A (informative): Change history

The table below indicates all change requests that have been incorporated into the present document since it was initially approved by 3GPP TSG-T.

Change history								
Date	Meeting	TSG Doc.	CR	Rev	Cat	Subject/Comment	Old	New
2000-04	TP-07	TP-000013	001	3	B	Security Attributes	3.0.0	3.1.0
		TP-000013	002	2	B	Incorporation of the USAT (USIM application toolkit) features.		
		TP-000013	003	3	B	File Control Parameters		
		TP-000013	004	1	F	Coding of status words		
		TP-000013	006		B	Definition of application session related procedures		
		TP-000013	007		D	Collection of 31.101 editorial changes		
		TP-000013	008		C	Power consumption		
		TP-000013	009		F	Changes to UICC specific files		
		TP-000013	010		F	Reservation of file IDs		
		2000-07	TP-08	TP-000094	011			
TP-000094	012				F	Use of status codes 6200, 6400 and 6500		
TP-000094	013				F	Correction of P2 value for the ACTIVATE and DEACTIVATE commands		
TP-000094	014				F	Clarification of the UICC characteristics byte		
TP-000094	015				F	Correction of ACTIVATE/DEACTIVATE commands		
TP-000094	016				F	Clarification of the file descriptor		
TP-000094	017				F	Selection by path correction		
TP-000094	018			1	F	Correction of ATR examples		
TP-000094	019				F	SEARCH RECORD command: alignment with ISO/IEC 7816-9		
TP-000094	020				F	Correction to T=0 mechanism		
TP-000094	022		F	Correction of the application activation termination procedures				
2000-10	TP-09	TP-000151	023		F	Replacement of the technical contents with a reference to ETSI TS 102 221. (Note: ETSI TS 101 221 is identical in technical content to TS 31.101 v3.2.0 plus the addition of several changes as listed in the annex of TS 102 221)	3.2.0	3.3.0
2001-03	TP-11					Issued as version 4.0.0 in order to create a complete set of specifications for release 4. The contents of version 4.0.0 are identical to the contents of version 3.3.0	3.3.0	4.0.0
2002-12	TP-18	TP-020279	025		F	Remove mention of application specifications from TS 31.101	4.0.0	4.1.0
2004-12	TP-26	TP-040255	031		F	Correction of non specific references	4.1.0	4.2.0
2004-12	TP-26					Reinstatement of original bullets in reference clause	4.2.0	4.2.1

History

Document history		
V4.0.0	March 2001	Publication
V4.1.0	December 2002	Publication
V4.2.1	December 2004	Publication